



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/746,706	12/22/2000	Vijayaraghavan Doraiswami	081862.P220	9666

7590

08/27/2003

Lester J. Vincent
BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP
Seventh Floor
12400 Wilshire Boulevard
Los Angeles, CA 90025-1026

EXAMINER

PATEL, NIKETA I

ART UNIT

PAPER NUMBER

2182

DATE MAILED: 08/27/2003

4

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/746,706

Applicant(s)

DORAISWAMI, VIJAYARAGHAVAN

Examiner

Niketa I. Patel

Art Unit

2182

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-36 are rejected under 35 U.S.C. 102(e) as being anticipated by Ji et al. U.S.

Patent Number: 6,496,475 (hereinafter referred to as “Ji”).

3. **Referring to claim 1**, *Ji* teaches a method comprising: receiving a logical connection number (LCN) associated with a first logical connection from a connection command (see column 3 – lines 11-65; column 4 – lines 1-4; column 5 – lines 64-67; column 6 – lines 1-40, 63-67; column 7 – lines 1-13, 28-42, 56-63; column 8 – lines 20-67; column – lines 1-2, 34-67); using the LCN as a first index to a location in a first memory area to retrieve a second index to a location in a second memory area (see column 3 – lines 11-65; column 4 – lines 1-4; column 5 – lines 64-67; column 6 – lines 1-40, 63-67; column 7 – lines 1-13, 28-42, 56-63; column 8 – lines 20-67; column – lines 1-2, 34-67); and using the second index to access the first logical connection from the location in the second memory area (see column 3 – lines 11-65; column 4 – lines 1-4; column 5 – lines 64-67; column 6 – lines 1-40, 63-67; column 7 – lines 1-13, 28-42, 56-63; column 8 – lines 20-67; column – lines 1-2, 34-67.)
4. **Referring to claim 2**, *Ji* teaches that the location in the first memory area is associated with an availability indicator, the availability indicator being on when the first logical connection

Art Unit: 2182

is available in the second memory area, the availability being off when the first logical connection is unavailable in the second memory area (see column 3 – lines 11-65; column 4 – lines 1-4; column 5 – lines 64-67; column 6 – lines 1-40, 63-67; column 7 – lines 1-13, 28-42, 56-63; column 8 – lines 20-67; column – lines 1-2, 34-67.)

5. **Referring to claim 3**, *Ji* teaches when the connection command is an allocate command and the availability indicator is on, the first logical connection is allocated from the location in the second memory area (see column 3 – lines 11-65; column 4 – lines 1-4; column 5 – lines 64-67; column 6 – lines 1-40, 63-67; column 7 – lines 1-13, 28-42, 56-63; column 8 – lines 20-67; column – lines 1-2, 34-67.)

6. **Referring to claim 4**, *Ji* teaches when the connection command is a deallocate command and the availability indicator is off, the first logical connection is deallocated to the location in the second memory area (see column 3 – lines 11-65; column 4 – lines 1-4; column 5 – lines 64-67; column 6 – lines 1-40, 63-67; column 7 – lines 1-13, 28-42, 56-63; column 8 – lines 20-67; column – lines 1-2, 34-67.)

7. **Referring to claim 5**, *Ji* teaches that the second memory area comprises an array of available logical connections, each array entry associated with a LCN of an available logical connection, wherein a third index is used to access a second logical connection at a bottom location of the array (see column 3 – lines 11-65; column 4 – lines 1-4; column 5 – lines 64-67; column 6 – lines 1-40, 63-67; column 7 – lines 1-13, 28-42, 56-63; column 8 – lines 20-67; column – lines 1-2, 34-67.)

8. **Referring to claim 6**, *Ji* teaches when the first logical connection associated with the connection command is available and when the connection command is the allocate command,

Art Unit: 2182

the second logical connection accessed by the third index is swapped with the first logical connection accessed by the second index such that the third index is used to access the first logical connection, wherein the first memory area is updated to reflect change in location of the second logical connection (see column 3 – lines 11-65; column 4 – lines 1-4; column 5 – lines 64-67; column 6 – lines 1-40, 63-67; column 7 – lines 1-13, 28-42, 56-63; column 8 – lines 20-67; column – lines 1-2, 34-67.)

9. **Referring to claim 7**, *Ji* teaches that after the first logical connection is accessed the third index is decremented to allow access to a new bottom location of the array (see column 3 – lines 11-65; column 4 – lines 1-4; column 5 – lines 64-67; column 6 – lines 1-40, 63-67; column 7 – lines 1-13, 28-42, 56-63; column 8 – lines 20-67; column – lines 1-2, 34-67.)

10. **Referring to claim 8**, *Ji* teaches that when the first logical connection associated with the connection command is unavailable and when the connection command is the deallocate command, the third index is incremented by one to be used to access a new bottom location of the array, wherein the first logical connection from the deallocate command is returned to the array at the new bottom location of the array (see column 3 – lines 11-65; column 4 – lines 1-4; column 5 – lines 64-67; column 6 – lines 1-40, 63-67; column 7 – lines 1-13, 28-42, 56-63; column 8 – lines 20-67; column – lines 1-2, 34-67.)

11. **Referring to claim 9**, *Ji* teaches that the availability associated with the first logical connection is set to on, and wherein the second index is updated to allow access to the first logical connection (see column 3 – lines 11-65; column 4 – lines 1-4; column 5 – lines 64-67; column 6 – lines 1-40, 63-67; column 7 – lines 1-13, 28-42, 56-63; column 8 – lines 20-67; column – lines 1-2, 34-67.)

Art Unit: 2182

12. **Referring to claim 10**, *Ji* teaches a computer readable medium having stored thereon sequences of instructions which are executable by a digital processing system, and which, when executed by the digital processing system, cause the system to perform a method, comprising: receiving a logical connection number (LCN) associated with a first logical connection from a connection command (see column 3 – lines 11-65; column 4 – lines 1-4; column 5 – lines 64-67; column 6 – lines 1-40, 63-67; column 7 – lines 1-13, 28-42, 56-63; column 8 – lines 20-67; column – lines 1-2, 34-67); using the LCN as a first index to a location in a first memory area to retrieve a second index to a location in a second memory area (see column 3 – lines 11-65; column 4 – lines 1-4; column 5 – lines 64-67; column 6 – lines 1-40, 63-67; column 7 – lines 1-13, 28-42, 56-63; column 8 – lines 20-67; column – lines 1-2, 34-67); and using the second index to access the first logical connection from the location in the second memory area (see column 3 – lines 11-65; column 4 – lines 1-4; column 5 – lines 64-67; column 6 – lines 1-40, 63-67; column 7 – lines 1-13, 28-42, 56-63; column 8 – lines 20-67; column – lines 1-2, 34-67.)

13. **Referring to claim 11**, *Ji* teaches that the location in the first memory area is associated with an availability indicator, the availability indicator being on when the first logical connection is available in the second memory area, the availability being off when the first logical connection is unavailable in the second memory area (see column 3 – lines 11-65; column 4 – lines 1-4; column 5 – lines 64-67; column 6 – lines 1-40, 63-67; column 7 – lines 1-13, 28-42, 56-63; column 8 – lines 20-67; column – lines 1-2, 34-67.)

14. **Referring to claim 12**, *Ji* teaches when the connection command is an allocate command and the availability indicator is on, the first logical connection is allocated from the location in the second memory area (see column 3 – lines 11-65; column 4 – lines 1-4; column 5 – lines 64-

Art Unit: 2182

67; column 6 – lines 1-40, 63-67; column 7 – lines 1-13, 28-42, 56-63; column 8 – lines 20-67; column – lines 1-2, 34-67.)

15. **Referring to claim 13**, *Ji* teaches when the connection command is a deallocate command and the availability indicator is off, the first logical connection is deallocated to the location in the second memory area (see column 3 – lines 11-65; column 4 – lines 1-4; column 5 – lines 64-67; column 6 – lines 1-40, 63-67; column 7 – lines 1-13, 28-42, 56-63; column 8 – lines 20-67; column – lines 1-2, 34-67.)

16. **Referring to claim 14**, *Ji* teaches that the second memory area comprises an array of available logical connections, each array entry associated with a LCN of an available logical connection, wherein a third index is used to access a second logical connection at a bottom location of the array (see column 3 – lines 11-65; column 4 – lines 1-4; column 5 – lines 64-67; column 6 – lines 1-40, 63-67; column 7 – lines 1-13, 28-42, 56-63; column 8 – lines 20-67; column – lines 1-2, 34-67.)

17. **Referring to claim 15**, *Ji* teaches when the first logical connection associated with the connection command is available and when the connection command is the allocate command, the second logical connection accessed by the third index is swapped with the first logical connection accessed by the second index such that the third index is used to access the first logical connection, wherein the first memory area is updated to reflect change in location of the second logical connection (see column 3 – lines 11-65; column 4 – lines 1-4; column 5 – lines 64-67; column 6 – lines 1-40, 63-67; column 7 – lines 1-13, 28-42, 56-63; column 8 – lines 20-67; column – lines 1-2, 34-67.)

Art Unit: 2182

18. **Referring to claim 16**, *Ji* teaches that after the first logical connection is accessed the third index is decremented to allow access to a new bottom location of the array (see column 3 – lines 11-65; column 4 – lines 1-4; column 5 – lines 64-67; column 6 – lines 1-40, 63-67; column 7 – lines 1-13, 28-42, 56-63; column 8 – lines 20-67; column – lines 1-2, 34-67.)

19. **Referring to claim 17**, *Ji* teaches that when the first logical connection associated with the connection command is unavailable and when the connection command is the deallocate command, the third index is incremented by one to be used to access a new bottom location of the array, wherein the first logical connection from the deallocate command is returned to the array at the new bottom location of the array (see column 3 – lines 11-65; column 4 – lines 1-4; column 5 – lines 64-67; column 6 – lines 1-40, 63-67; column 7 – lines 1-13, 28-42, 56-63; column 8 – lines 20-67; column – lines 1-2, 34-67.)

20. **Referring to claim 18**, *Ji* teaches that the availability associated with the first logical connection is set to on, and wherein the second index is updated to allow access to the first logical connection (see column 3 – lines 11-65; column 4 – lines 1-4; column 5 – lines 64-67; column 6 – lines 1-40, 63-67; column 7 – lines 1-13, 28-42, 56-63; column 8 – lines 20-67; column – lines 1-2, 34-67.)

21. **Referring to claim 19**, *Ji* teaches a system comprising: a standby card to receive a connection command from an active card, the connection command associated with a logical connection number (LCN) of a first logical connection, the standby card processing the connection command on the standby card (see column 3 – lines 11-65; column 4 – lines 1-4; column 5 – lines 64-67; column 6 – lines 1-40, 63-67; column 7 – lines 1-13, 28-42, 56-63; column 8 – lines 20-67; column – lines 1-2, 34-67), said processing comprises: using the LCN as

Art Unit: 2182

a first index to a location in a first memory area to retrieve a second index to a location in a second memory area (see column 3 – lines 11-65; column 4 – lines 1-4; column 5 – lines 64-67; column 6 – lines 1-40, 63-67; column 7 – lines 1-13, 28-42, 56-63; column 8 – lines 20-67; column – lines 1-2, 34-67); and rising the second index to access the first logical connection from the location in the second memory area (see column 3 – lines 11-65; column 4 – lines 1-4; column 5 – lines 64-67; column 6 – lines 1-40, 63-67; column 7 – lines 1-13, 28-42, 56-63; column 8 – lines 20-67; column – lines 1-2, 34-67.)

22. **Referring to claim 20**, *Ji* teaches that the location in the first memory area is associated with an availability indicator, the availability indicator being on when the first logical connection is available in the second memory area, the availability being off when the first logical connection is unavailable in the second memory area (see column 3 – lines 11-65; column 4 – lines 1-4; column 5 – lines 64-67; column 6 – lines 1-40, 63-67; column 7 – lines 1-13, 28-42, 56-63; column 8 – lines 20-67; column – lines 1-2, 34-67.)

23. **Referring to claim 21**, *Ji* teaches when the connection command is an allocate command and the availability indicator is on, the first logical connection is allocated from the location in the second memory area (see column 3 – lines 11-65; column 4 – lines 1-4; column 5 – lines 64-67; column 6 – lines 1-40, 63-67; column 7 – lines 1-13, 28-42, 56-63; column 8 – lines 20-67; column – lines 1-2, 34-67.)

24. **Referring to claim 22**, *Ji* teaches when the connection command is a deallocate command and the availability indicator is off, the first logical connection is deallocated to the location in the second memory area (see column 3 – lines 11-65; column 4 – lines 1-4; column 5

Art Unit: 2182

– lines 64-67; column 6 – lines 1-40, 63-67; column 7 – lines 1-13, 28-42, 56-63; column 8 – lines 20-67; column – lines 1-2, 34-67.)

25. **Referring to claim 23**, *Ji* teaches that the second memory area comprises an array of available logical connections, each array entry associated with a LCN of an available logical connection, wherein a third index is used to access a second logical connection at a bottom location of the array (see column 3 – lines 11-65; column 4 – lines 1-4; column 5 – lines 64-67; column 6 – lines 1-40, 63-67; column 7 – lines 1-13, 28-42, 56-63; column 8 – lines 20-67; column – lines 1-2, 34-67.)

26. **Referring to claim 24**, *Ji* teaches when the first logical connection associated with the connection command is available and when the connection command is the allocate command, the second logical connection accessed by the third index is swapped with the first logical connection accessed by the second index such that the third index is used to access the first logical connection, wherein the first memory area is updated to reflect change in location of the second logical connection (see column 3 – lines 11-65; column 4 – lines 1-4; column 5 – lines 64-67; column 6 – lines 1-40, 63-67; column 7 – lines 1-13, 28-42, 56-63; column 8 – lines 20-67; column – lines 1-2, 34-67.)

27. **Referring to claim 25**, *Ji* teaches that after the first logical connection is accessed the third index is decremented to allow access to a new bottom location of the array (see column 3 – lines 11-65; column 4 – lines 1-4; column 5 – lines 64-67; column 6 – lines 1-40, 63-67; column 7 – lines 1-13, 28-42, 56-63; column 8 – lines 20-67; column – lines 1-2, 34-67.)

28. **Referring to claim 26**, *Ji* teaches when the first logical connection associated with the connection command is unavailable and when the connection command is the deallocate

Art Unit: 2182

command, the third index is incremented by one to be used to access a new bottom location of the array, wherein the first logical connection from the deallocate command is returned to the array at the new bottom location of the array (see column 3 – lines 11-65; column 4 – lines 1-4; column 5 – lines 64-67; column 6 – lines 1-40, 63-67; column 7 – lines 1-13, 28-42, 56-63; column 8 – lines 20-67; column – lines 1-2, 34-67.)

29. **Referring to claim 27**, *Ji* teaches that the availability associated with the first logical connection is set to on, and wherein the second index is updated to allow access to the first logical connection (see column 3 – lines 11-65; column 4 – lines 1-4; column 5 – lines 64-67; column 6 – lines 1-40, 63-67; column 7 – lines 1-13, 28-42, 56-63; column 8 – lines 20-67; column – lines 1-2, 34-67.)

30. **Referring to claim 28**, *Ji* teaches that a system comprising: means for receiving a connection command from an active card, the connection command associated with a logical connection number (LCN) of a first logical connection (see column 3 – lines 11-65; column 4 – lines 1-4; column 5 – lines 64-67; column 6 – lines 1-40, 63-67; column 7 – lines 1-13, 28-42, 56-63; column 8 – lines 20-67; column – lines 1-2, 34-67); and means for processing the connection command comprising: means for using the LCN as a first index to a location in a first memory area to retrieve a second index to a location in a second memory area (see column 3 – lines 11-65; column 4 – lines 1-4; column 5 – lines 64-67; column 6 – lines 1-40, 63-67; column 7 – lines 1-13, 28-42, 56-63; column 8 – lines 20-67; column – lines 1-2, 34-67); and means for using the second index to access the first logical connection from the location in the second memory area (see column 3 – lines 11-65; column 4 – lines 1-4; column 5 – lines 64-67; column

Art Unit: 2182

6 – lines 1-40, 63-67; column 7 – lines 1-13, 28-42, 56-63; column 8 – lines 20-67; column – lines 1-2, 34-67.)

31. **Referring to claim 29**, *Ji* teaches that the location in the first memory area is associated with an availability indicator, the availability indicator being on when the first logical connection is available in the second memory area, the availability being off when the first logical connection is unavailable in the second memory area (see column 3 – lines 11-65; column 4 – lines 1-4; column 5 – lines 64-67; column 6 – lines 1-40, 63-67; column 7 – lines 1-13, 28-42, 56-63; column 8 – lines 20-67; column – lines 1-2, 34-67.)

32. **Referring to claim 30**, *Ji* teaches when the connection command is an allocate command and the availability indicator is on, the first logical connection is allocated from the location in the second memory area (see column 3 – lines 11-65; column 4 – lines 1-4; column 5 – lines 64-67; column 6 – lines 1-40, 63-67; column 7 – lines 1-13, 28-42, 56-63; column 8 – lines 20-67; column – lines 1-2, 34-67.)

33. **Referring to claim 31**, *Ji* teaches when the connection command is a deallocate command and the availability indicator is off, the first logical connection is deallocated to the location in the second memory area (see column 3 – lines 11-65; column 4 – lines 1-4; column 5 – lines 64-67; column 6 – lines 1-40, 63-67; column 7 – lines 1-13, 28-42, 56-63; column 8 – lines 20-67; column – lines 1-2, 34-67.)

34. **Referring to claim 32**, *Ji* teaches that the second memory area comprises an array of available logical connections, each array entry associated with a LCN of an available logical connection, wherein a third index is used to access a second logical connection at a bottom location of the array (see column 3 – lines 11-65; column 4 – lines 1-4; column 5 – lines 64-67;

Art Unit: 2182

column 6 – lines 1-40, 63-67; column 7 – lines 1-13, 28-42, 56-63; column 8 – lines 20-67;
column – lines 1-2, 34-67.)

35. **Referring to claim 33**, *Ji* teaches when the first logical connection associated with the connection command is available and when the connection command is the allocate command, the second logical connection accessed by the third index, is swapped with the first logical connection accessed by the second index such that the third index is used to access the first logical connection, wherein the first memory area is updated to reflect change in location of the second logical connection (see column 3 – lines 11-65; column 4 – lines 1-4; column 5 – lines 64-67; column 6 – lines 1-40, 63-67; column 7 – lines 1-13, 28-42, 56-63; column 8 – lines 20-67; column – lines 1-2, 34-67.)

36. **Referring to claim 34**, *Ji* teaches that after the first logical connection is accessed the third index is decremented to allow access to a new bottom location of the array (see column 3 – lines 11-65; column 4 – lines 1-4; column 5 – lines 64-67; column 6 – lines 1-40, 63-67; column 7 – lines 1-13, 28-42, 56-63; column 8 – lines 20-67; column – lines 1-2, 34-67.)

37. **Referring to claim 35**, *Ji* teaches when the first logical connection associated with the connection command is unavailable and when the connection command is the deallocate command, the third index is incremented by one to be used to access a new bottom location of the array, wherein the first logical connection from the deallocate command is returned to the array at the new bottom location of the array (see column 3 – lines 11-65; column 4 – lines 1-4; column 5 – lines 64-67; column 6 – lines 1-40, 63-67; column 7 – lines 1-13, 28-42, 56-63; column 8 – lines 20-67; column – lines 1-2, 34-67.)

Art Unit: 2182

38. Referring to claim 36, *Ji* teaches that the availability associated with the first logical connection is set to on, and wherein the second index is updated to allow access to the first logical connection (see column 3 – lines 11-65; column 4 – lines 1-4; column 5 – lines 64-67; column 6 – lines 1-40, 63-67; column 7 – lines 1-13, 28-42, 56-63; column 8 – lines 20-67; column – lines 1-2, 34-67.)

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following documents have been made record of to further show the state of the art as it pertains to recovery of a failed channel in a network environment.

Fedyk et al. U.S. Patent Number: 5,848,055

Yrjana U.S. Patent Number: 6,370,232

Chabanet et al. U.S. Patent Number: 5,426,773

Suutari et al. U.S. Patent Number: 6,278,688

Nagai et al. U.S. Patent Number: 6,580,689

Heeren et al. U.S. Patent Number: 6,311,288

Hamami U.S. Patent Number: 5,959,972

Vatuone U.S. Patent Number: 5,621,721

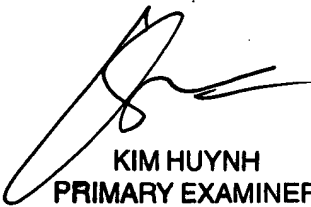
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Niketa I. Patel whose telephone number is (703) 305 4893. The examiner can normally be reached on M-F 9:00 A.M. to 5:00 P.M.

Art Unit: 2182

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A. Gaffin can be reached on (703) 308 3301. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305 3900.

NP



KIM HUYNH
PRIMARY EXAMINER

8/22/03